

**INDUCTIVELY CHARGED BATTERY PACK****Abstract**

An inductive charging systems transfers energy by inductively coupling a source coil on a charging source to a receiver coil on a charging portion of a battery pack. The source current is received in the battery pack and converted to direct current for storage in the battery pack cells. Communication between a charging source and the charging portion is provided. A wireless communication arrangement provides for authentication of devices that are allowed by a source to be charged.